

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

image reading means for reading a document image  
to generate an image signal;

5 image forming means for forming a copying image  
corresponding to the image signal supplied from the  
image reading means, on an image receiving medium;

feeding means for feeding the image receiving  
medium to the image forming means;

10 magnification setting means for setting a reading  
magnification when the document image is read by the  
image reading means; and

timing control means for controlling at least one  
of timing of supply of the image signal from the image  
15 reading means to the image forming means and timing of  
feed of the image receiving medium from the feeding  
means to the image forming means such that a size of  
a margin between a leading edge of the image receiving  
medium and that of the copying image formed on the  
20 image receiving medium is fixed irrespective of the  
reading magnification.

2. An image forming apparatus comprising:

image reading means for reading a document image  
to generate an image signal;

25 image forming means for forming a copying image  
corresponding to the image signal supplied from the  
image reading means, on an image receiving medium;

feeding means for feeding the image receiving medium to the image forming means;

magnification setting means for setting a reading magnification when the document image is read by the image reading means; and

timing control means for controlling timing of supply of the image signal from the image reading means to the image forming means such that a size of a margin between a leading edge of the image receiving medium and that of the copying image formed on the image receiving medium is fixed irrespective of the reading magnification.

3. An image forming apparatus comprising:

image reading means for reading a document image to generate an image signal;

image forming means for forming a copying image corresponding to the image signal supplied from the image reading means, on image receiving medium;

feeding means for feeding the image receiving medium to the image forming means;

magnification setting means for setting a reading magnification when the document image is read by the image reading means; and

timing control means for controlling timing of feed of the image receiving medium from the feeding means to the image forming means such that a size of a margin between a leading edge of the image receiving

medium and that of the copying image formed on the image receiving medium is fixed irrespective of the reading magnification.

4. An image forming system comprising a scanner  
5 for scanning an image of a document to output an image signal and a printer for copying the image onto an image receiving medium in response to the image signal, wherein:

the system comprises scanning magnification  
10 setting means for setting a scanning magnification when the scanner scans the document;

the scanner includes an image sensor for  
outputting a signal generated by optically scanning  
the document in a main scanning direction and a sub-  
15 scanning direction perpendicular to the main scanning direction;

the printer includes sub-scanning start signal  
generation means for generating a sub-scanning start  
signal for causing the scanner to start scanning the  
20 document in the sub-scanning direction; and

the system is configured so as to change timing at  
which the sub-scanning start signal generation means  
generates the sub-scanning start signal in accordance  
with the scanning magnification set by the scanning  
25 magnification setting means.

5. The image forming system according to claim 4,  
wherein the timing is changed such that a size of a

margin between a leading edge of the image receiving medium and that of the image copied onto the image receiving medium is fixed irrespective of the scanning magnification.

5           6. An image forming system comprising a scanner for scanning an image of a document to output an image signal and a printer for copying the image onto an image receiving medium in response to the image signal, wherein:

10           the system comprises scanning magnification setting means for setting a scanning magnification when the scanner scans the document;

            the scanner includes a delay memory for temporarily storing the image signal and then  
15           outputting the image signal;

            the printer includes feeding means for feeding the image receiving medium; and

            the system is configured so as to change relative timing between timing at which the image signal is  
20           output from the delay memory and timing at which the image receiving medium is fed by the feeding means in accordance with the scanning magnification set by the scanning magnification setting means.

            7. The image forming system according to claim 6,  
25           wherein the relative timing is changed such that a size of a margin between a leading edge of the image receiving medium and that of the image copied onto the

image receiving medium is fixed irrespective of the scanning magnification.

8. A color image forming apparatus comprising:  
optical means for reading a color image of  
5 a document;

an image sensor for scanning the color image read  
by the optical means in a main scanning direction and  
a sub-scanning direction perpendicular to the main  
scanning direction and outputting image signals of  
10 different colors from the color image, the image sensor  
including a plurality of line sensors arranged at given  
intervals in the sub-scanning direction;

timing correction means for correcting a  
difference in timing between the image signals of  
15 different colors which is caused by the given intervals  
in the sub-scanning direction of the plurality of line  
sensors;

copying means for copying the color image of the  
document onto an image receiving medium in response to  
20 the image signals of different colors whose timing  
difference is corrected by the timing correction means;

reading magnification setting means for setting  
a reading magnification of the document; and

timing control means for changing at least one of  
25 operation timing of the image sensor and that of the  
copying means based on a specific reading magnification  
set by the reading magnification setting means.

9. The color image forming apparatus according to claim 8, wherein the image sensor includes three line sensors having a number of photoelectric converting elements arranged in the main scanning direction, and  
5 the three line sensors are arranged in parallel at regular intervals in the sub-scanning direction and including a first primary-color line sensor, a second primary-color line sensor, and a third primary-color line sensor.

10 10. The color image forming apparatus according to claim 9, wherein the timing correcting means includes a first delay circuit for delaying a first-color image signal sensed by the first primary-color line sensor by a time period which is twice as long as each of the  
15 regular intervals and a second delay circuit for delaying a second-color image signal sensed by the second primary-color line sensor by a time period corresponding to each of the regular intervals.

20 11. The color image forming apparatus according to claim 10, wherein the timing correcting means further includes a delay circuit for simultaneously storing the first-color image signal delayed by the first delay circuit, the second-color image signal delayed by the second delay circuit, and a third-color image signal  
25 sensed by the third primary-color line sensor, and simultaneously outputting the first-color image signal, the second-color image signal, and the third-color

image signal after a lapse of a predetermined period of time.

12. An image forming method using a system including a scanner for scanning an image of a document to output an image signal, a printer for copying the image onto an image receiving medium in response to the image signal, and scanning magnification setting means for setting a scanning magnification when the scanner scans the document, the scanner including an image sensor for outputting a signal generated by optically scanning the document in a main scanning direction and a sub-scanning direction perpendicular to the main scanning direction, and the printer including sub-scanning start signal generation means for generating a sub-scanning start signal for causing the scanner to start scanning the document in the sub-scanning direction, the method comprising:

checking whether the scanning magnification is changed; and

varying timing at which the sub-scanning start signal is generated in accordance with the scanning magnification changed by the scanning magnification setting means.

13. The image forming method according to claim 12, wherein the timing is changed such that a size of a margin between a leading edge of the image receiving medium and that of the image copied onto the

image receiving medium is fixed irrespective a change in the scanning magnification.

14. An image forming method using a system including a scanner for scanning an image of a document to output an image signal, a printer for copying the image onto an image receiving medium in response to the image signal, and scanning magnification setting means for setting a scanning magnification when the scanner scans the document, the scanner including a delay memory for temporarily storing the image signal and then outputting the image signal, and the printer including feeding means for feeding the image receiving medium, the method comprising:

checking whether the scanning magnification is changed; and

varying relative timing between timing at which the image signal is output from the delay memory and timing at which the image receiving medium is fed by the feeding means in accordance with the scanning magnification changed by the scanning magnification setting means.

15. The image forming method according to claim 14, wherein the relative timing is changed such that a size of a margin between a leading edge of the image receiving medium and that of the image copied onto the image receiving medium is fixed irrespective a change in the scanning magnification.